



## MONEL MACHINING

An example of the technical assistance provided industry and government clients by NASA's Industrial Applications Centers (see page 136) is a research job performed for Castle Industries, Inc., Beacon, New York by the New England Research Application Center (NERAC) at the University of Connecticut.

Castle is a small machine job shop manufacturing replacement plumbing repair parts, such as faucet, tub and ballcock seats. Formed in 1978, Castle is owned and operated by two women—president Therese Castley and vice president Christine Martignetti—in a field of industrial activity where distaff management is unusual. At top left, Castley displays a handful of faucet seats; they are similar to Castle's earlier brass parts but made of a type of metal called R-405 monel. In the photo above, Castley is instructing a machine operator in monel machining technique.

Castley decided to introduce monel because it offered a chance to improve competitiveness and expand the product line. Because of difficulties in machining monel, there is a shortage of replacement parts, hence a good market; also, buyers at most government installations will accept only monel for certain types of replacement parts. Before expanding, Castle Industries sought NERAC assistance on monel technology. NERAC assigned a metals specialist who searched seven computerized data bases and produced an informational package that proved very helpful. NASA's own data base yielded a wealth of information on machining monel with the company's Davenport screw machines (left). Castley estimates that the new monel line will boost sales by more than \$1 million over five years.